

SECTION 260**SUBDRAINS****DESCRIPTION****260.20 General.**

This work shall consist of constructing subdrains, using pipe and crushed stone filter material in accordance with the plans and these specifications and in close conformity with the lines and grades shown on the plans or established by the Engineer.

The kind of pipe to be used shall be as designated on the plans and in the Proposal under the item for the particular kind of subdrains required. If the item calls for a choice of pipe, Bidder shall insert his/her price for the kind of pipe he/she will supply in the proper space provided.

MATERIALS**260.40 General.**

Materials shall meet the requirements specified in the following Subsections of Division III, Materials:

Perforated Corrugated Metal Pipe	M5.03.1
Perforated Corrugated Aluminum Pipe	M5.03.4
Crushed Stone	M2.01.0
Slot-Perforated Corrugated Plastic Pipe	M5.03.9

CONSTRUCTION METHODS**260.60 Excavation. (See Subsection 140.60)**

The drain trench shall be excavated to the depth designated on the plans or, if directed, to a stratum of impervious material.

Where no structure is to be placed at the ends of the subdrain pipe, the trench shall be excavated a distance of 1 meter beyond the end of the pipe.

The excavation shall proceed in advance of the actual drain construction only to the extent the Engineer directs. The width of the trench for pipe of more than 300 millimeters in diameter shall be 300 millimeters greater than the nominal diameter of the pipe. The width of the trench for pipe 300 millimeters or less in diameter shall be 600 millimeters.

Where rock is encountered in the excavation, no part of any rock remaining in the trench shall come within 150 millimeters of any portion of the pipe.

260.61 Laying Pipe.

Perforated subdrain pipe of the type specified shall normally be laid with the perforations located as shown on the Construction Standard Drawings; however the Engineer may direct that the perforations be located otherwise, if conditions warrant.

Joints shall be grouted or sealed unless otherwise specified on the plans or in the Special Provisions.

260.62 Filling Drain Trench.

The pipe shall be laid on a 50 millimeter bed of crushed stone and the space about, above, and in the

1 meter beyond the ends of the pipe shall be filled with 13 millimeter or 19 millimeter crushed stone.

The Contractor shall be responsible for keeping the backfill material clean and free of objectionable material from a line 25 millimeters below the flow line of the pipe to the top of the trench.

260.63 Protection of Inlets and Open Outlets.

Inlets and open outlets of subdrains shall be covered with a 730 micrometer galvanized wire screen of 6.3 millimeter mesh satisfactorily fastened to the pipe.

COMPENSATION

260.80 Method of Measurement.

Subdrain pipe shall be measured in place and the quantity to be paid for shall be the length of pipe actually constructed, plus an allowance of 1 meter for open ends.

Trench excavation greater than a depth of 1.5 meters and rock excavation shall be measured as specified in Subsection 140.80 for Class B Trench Excavation and Class B Rock Excavation respectively.

260.81 Basis of Payment.

The above work will be paid for at the contract unit price per linear meter under the appropriate item for Subdrains with the specified size and kind of pipe, complete in place.

Trench excavation greater than a depth of 1.5 meters and rock excavation will be paid for as specified in Subsection 140.81 for Class B Trench Excavation and Class B Rock Excavation.

260.82 Payment Items.

261.*	___ millimeter Perforated Corrugated Metal Pipe, ___ micrometer (Subdrain)	Meter
262.*	___ millimeter Perforated Corrugated Aluminum Pipe, ___ micrometer (Subdrain)	Meter
265.*	___ millimeter Pipe Subdrain – Option	Meter
269.*	___ millimeter Slot-Perforated Corrugated Plastic Pipe (Subdrain)	Meter
142.	Class B Trench Excavation	Cubic Meter
144.	Class B Rock Excavation	Cubic Meter

*Pipe or appurtenance size will be included as part of the item number in order to differentiate between the sizes.

SECTION 270

PIPES REMOVED AND RELAID

OR STACKED

DESCRIPTION

270.20 General.

This work shall consist of removing present pipes and relaying or stacking them in accordance with these specifications and in close conformity with the lines and grades shown on the plans or established by the Engineer.

MATERIALS

270.40 Material for Pipe Joints shall conform to the requirements of Subsection 230.40.